

Project Design Phase II

Solution Requirements (Functional & Non-functional)

Date	16 October 2022
Team ID	PNT2022TMID50055
Project Name	Smart Waste Management system for Metropolitan Cities
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR.NO	Functional Requirements	Sub Requirement (Story/Sub-Task)
FR-1	User registration	Registration through e-mail id & Mobile number
FR-2	User confirmation	Confirmation via email Confirmation via OTP
FR-3	Web application	Node-Red -Service
FR-4	Configure to Device	IBM Watson IOT Platform
FR-5	Database	Detailed database of bins and stands
FR-6	Python Script	IBM IOT Platform

Non Functional Requirements

Following are the non-functional requirements of the proposed solution

FR.NO	Non-Functional Requirement	Description
NFR-1	Usability	The reduction of waste
NFR-2	Security	Prediction in bin fulness
NFR-3	Reliability	Effective waste disposal
NFR-4	Performance	Optimize source allocation, reduce running costs and increase sustainability of waste services
NFR-5	Availability	Available for the allocated time by the municipality or the private companies
NFR-6	Scalability	This is very effective in managing waste in big city. Here priority system is used to clean the city all the time without any overflowing dumpsters